



SEQUENCE LISTING

<110> Yen-Potin, Frances
Denison, Blake
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<120> Apolipoprotein A-IV-related Protein: Polypeptide, Polynucleotide
Sequences and Biallelic Markers Thereof

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<141> 2001-04-25

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<150> US 60/141,032
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Leu	Leu	Gln	Gly	Leu	Gln	Ser	Arg	Val	Val	His	His	Thr	Gly	Arg	Phe		
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65      70      75      80
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85      90      95
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Pro Tyr Ala Gln Asp Val Gln Glu Lys Leu Asn His Gln Leu Glu Gly
225                      230                      235                      240

Leu Ala Phe Gln Met Lys Lys Gln Ala Glu Glu Leu Lys Ala Lys Ile
                245                      250                      255

Ser Ala Asn Ala Asp Glu Leu Arg Gln Lys Leu Val Pro Val Ala Glu
                260                      265                      270

Asn Val His Gly His Leu Lys Gly Asn Thr Glu Gly Leu Gln Lys Ser
 275                      280                      285

Leu Leu Glu Leu Arg Ser His Leu Asp Gln Gln Val Glu Glu Phe Arg
 290                      295                      300

Leu Lys Val Glu Pro Tyr Gly Glu Thr Phe Asn Lys Ala Leu Val Gln
305                      310                      315                      320

Gln Val Glu Asp Leu Arg Gln Lys Leu Gly Pro Leu Ala Gly Asp Val
                325                      330                      335

Glu Gly His Leu Ser Phe Leu Glu Lys Asp Leu Arg Asp Lys Val Asn
                340                      345                      350

Thr Phe Phe Ser Thr Leu Lys Glu Glu Ala Ser Gln Gly Gln Ser Gln
 355                      360                      365

Ala Leu Pro Ala Gln Glu Lys Ala Gln Ala Pro Leu Glu Gly
 370                      375                      380

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<210> 8
<211> 396
<212> PRT
<213> Human ApoA IV

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<400> 8

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Met Phe Leu Lys Ala Val Val Leu Thr Leu Ala Leu Val Ala Val Ala
 1 5 10 15
 Gly Ala Arg Ala Glu Val Ser Ala Asp Gln Val Ala Thr Val Met Trp
 20 25 30
 Asp Tyr Phe Ser Gln Leu Ser Asn Asn Ala Lys Glu Ala Val Glu His
 35 40 45
 Leu Gln Lys Ser Glu Leu Thr Gln Gln Leu Asn Ala Leu Phe Gln Asp
 50 55 60
 Lys Leu Gly Glu Val Asn Thr Tyr Ala Gly Asp Leu Gln Lys Lys Leu
 65 70 75 80
 Val Pro Phe Ala Thr Glu Leu His Glu Arg Leu Ala Lys Asp Ser Glu
 85 90 95
 Lys Leu Lys Glu Glu Ile Gly Lys Glu Leu Glu Glu Leu Arg Ala Arg
 100 105 110
 Leu Leu Pro His Ala Asn Glu Val Ser Gln Lys Ile Gly Asp Asn Leu
 115 120 125
 Arg Glu Leu Gln Gln Arg Leu Glu Pro Tyr Ala Asp Gln Leu Arg Thr
 130 135 140
 Gln Val Asn Thr Gln Ala Glu Gln Leu Arg Arg Gln Leu Thr Pro Tyr
 145 150 155 160
 Ala Gln Arg Met Glu Arg Val Leu Arg Glu Asn Ala Asp Ser Leu Gln
 165 170 175
 Ala Ser Leu Arg Pro His Ala Asp Glu Leu Lys Ala Lys Ile Asp Gln
 180 185 190
 Asn Val Glu Glu Leu Lys Gly Arg Leu Thr Pro Tyr Ala Asp Glu Phe
 195 200 205
 Lys Val Lys Ile Asp Gln Thr Val Glu Glu Leu Arg Arg Ser Leu Ala
 210 215 220
 Pro Tyr Ala Gln Asp Thr Gln Glu Lys Leu Asn His Gln Leu Glu Gly
 225 230 235 240
 Leu Thr Phe Gln Met Lys Lys Asn Ala Glu Glu Leu Lys Ala Arg Ile
 245 250 255
 Ser Ala Ser Ala Glu Glu Leu Arg Gln Arg Leu Ala Pro Leu Ala Glu
 260 265 270
 Asp Val Arg Gly Asn Leu Lys Gly Asn Thr Glu Gly Leu Gln Lys Ser
 275 280 285

Leu Ala Glu Leu Gly Gly His Leu Asp Gln Gln Val Glu Glu Phe Arg
 290 295 300

Arg Arg Val Glu Pro Tyr Gly Glu Asn Phe Asn Lys Ala Leu Val Gln
 305 310 315 320

Gln Met Glu Gln Leu Arg Gln Lys Leu Gly Pro His Ala Gly Asp Val
 325 330 335

Glu Gly His Leu Ser Phe Leu Glu Lys Asp Leu Arg Asp Lys Val Asn
 340 345 350

Ser Phe Phe Ser Thr Phe Lys Glu Lys Glu Ser Gln Asp Lys Thr Leu
 355 360 365

Ser Leu Pro Glu Leu Glu Gln Gln Gln Glu Gln Gln Gln Glu Gln Gln
 370 375 380

Gln Glu Gln Val Gln Met Leu Ala Pro Leu Glu Ser
 385 390 395

<210> 9

<211> 1388

<212> DNA

<213> Swine Apoa IV

<400> 9

gcacaggtga gctgcctgag aacctctcct ccacggagga cccagtgcag taagagacac	60
ttccagccca gcgggagctc aggatgttcc tgaaggctgt ggtcctgagc ctggccctgg	120
tggccgtcac cgggtgcccg gctgaggtca atgccgacca agtggctact gtgatgtggg	180
actacttcag ccagctgggc agcaatgcca agaaggctgt ggaacatctc cagaagtctg	240
agctcaccga gcagctcaac actctcttcc aggacaaact tggggaagtg aacacctaca	300
cggaggacct gcagaagaag ctggtgccct ttgccacgga gctgcatgaa cgctgacca	360
aggactcaga gaagctgaag gaggagattc gaaggagct ggaggagctg cgagcccggc	420
tgtgccccca cgctaccgag gtgagccaga aaatcgga caacgtgcgc gagctgcagc	480
agcgctggg gccctttacg ggagggtgc gcaccaggt caacacccag gttcagcagc	540
tgcagcgcca gctgaagccc tacgcagagc gcatggagtc cgtgctacgg cagaacatcc	600
gcaacctgga ggctccgtg gcaccctatg cggatgagtt caaggccaag atcgatcaga	660
atgtggagga gctcaagggg agcctcacgc cctatgcgga ggagctcaag gccaatatcg	720
atcagaacgt ggaggagctg cggcgagcc tggcccccta tgcgcaggac gtccaggaga	780
agctcaacca ccagctcgag ggctggcct tccagatgaa gaagcaggca gaggagctga	840


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aggccaagat ctcgccaat gccgacgagc tgcggcagaa gctggtgccg gtggccgaga    900
acgtgcatgg ccattctgaag ggcaacaccg aggggctgca gaagtcgctg ctggagctga    960
gaagccacct ggaccagcag gtggaggagt tccgcctcaa ggtggagccc tacggggaga    1020
ccttcaacaa agctttggtg cagcaggtgg aggatctcag gcagaagctg ggccctttgg    1080
cgggggacgt ggagggccac ctgagcttcc tggagaagga tctgagggac aaggtcaaca    1140
ccttcttcag caccctcaaa gaggaggcga gccagggcca gagccaggcc ctccctgcac    1200
aggagaaggc gcaggccctt ttggagggtc gagctgcccc tggtgctccc accccacccc    1260
tgacacctgc cctgccctgc cccctgtctg tctgtctgtc ccaaagcagt tcttgtacaa    1320
acctagggat acatgtccag tggaccgtga cactacctct ccatactcaa taaagctgct    1380
gagaaact                                     1388

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<210> 10

<211> 1466

<212> DNA

<213> Human Apoa IV

<400> 10

```

agttcccact gcagcgagg tgagctctcc tgaggacctc tctgtcagct cccctgattg    60
tagggaggca tccagtgtgg caagaaactc ctccagccca gcaagcagct caggatgttc    120
ctgaaggccg tggctctgac cctggccctg gtggctgtcg ccggagccag ggctgaggtc    180
agtgtgacc aggtggccac agtgatgtgg gactacttca gccagctgag caacaatgcc    240
aaggaggccg tggaacatct ccagaaatct gaactcacc cagcaactcaa tgccctcttc    300
caggacaaac ttggagaagt gaacacttac gcaggtgacc tgagaagaa gctggtgccc    360
tttgccaccg agctgcatga acgcctggcc aaggactcgg agaaactgaa ggaggagatt    420
gggaaggagc tggaggagct gagggcccgg ctgctgcccc atgccaatga ggtgagccag    480
aagatcgggg acaacctgcg agagcttcag cagcgcctgg agccctacgc ggaccagctg    540
cgcacccagg tcaacacgca ggccgagcag ctgcggcgcc agctgacccc ctacgcacag    600
cgcatggaga gagtgtgctg ggagaacgcc gacagcctgc aggcctcgct gagggccac    660
gccgacgagc tcaaggccaa gatcgaccag aacgtggagg agctcaaggg acgccttacg    720
ccctacgctg acgaattcaa agtcaagatt gaccagaccg tggaggagct gcgccgcagc    780
ctggctccct atgtcagga cagcaggag aagctcaacc accagcttga gggcctgacc    840

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```

ttccagatga agaagaacgc cgaggagctc aaggccagga tctcggccag tgccgaggag      900
ctgcggcaga ggctggcgcc cttggccgag gacgtgcgtg gcaacctgag gggcaacacc      960
gaggggctgc agaagtcact ggagagctg ggtgggcacc tggaccagca ggtggaggag     1020
ttccgacgcc ggggtggagcc ctacggggaa aacttcaaca aagccctggt gcagcagatg     1080
gaacagctca ggacgaaact gggcccccat gcgggggacg tggaaggcca cttgagcttc     1140
ctggagaagg acctgagggg caaggtcaac tccttcttca gcaccttcaa ggagaaagag     1200
agccaggaca agactctctc cctccctgag ctggagcaac agcaggaaca gcatcaggag     1260
cagcagcagg agcaggtgca gatgctggcc ctttggaga gctgagctgc ccctggtgca     1320
ctggccccac cctcgtggac acctgccctg ccctgccacc tgtctgtctg tcccaaagaa     1380
gttctggtat gaacttgagg acacatgtcc agtgggaggt gagaccacct ctcaatattc     1440
aataaagctg ctgagaatct agcctc                                           1466

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<210> 11
<211> 1850
<212> DNA
<213> Rat RAP3 A

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```

<400> 11
gcatcgtgga aagcatggct gccgtcatca cctgggcact cgccctcctc tcagtgtttg      60
caactgtaca ggcgaggaag agcttctggg agtacttcgg ccagaacagc cagggcaaag     120
gcatgatggg ccagcagcag aagctggcac aggagagcct gaaaggtagc ttggagcaag     180
acctctacaa tatgaacaat ttcctagaaa agctgggacc cttgagagag cctgggaagg     240
agcctcctcg gctggcacag gatccagaag gcattcggaa gcagttgcag caagagctgg     300
aggaagtgag cacacgcctg gagccctaca tggctgcaaa gcaccagcag gtcggctgga     360
acctggaggg cttgaggcag cagttgaaac cctacacggt cgagctgatg gagcaggtag     420
gcctgagcgt gcaggatctg caagaacagc tgcgcatggt gggaaaaggc accaaggccc     480
agctcctggg gggcgtggat gaggcgatga gcctgctgca ggatatgcaa agtcgagtgc     540
tgcaccatac ggaccgagtc aaagaactct tccaccctta tgcagaacgc ttggtgactg     600
gaattgggca ccatgtgcag gagctgcacc ggagtgttgc tcctcacgca gttgccagcc     660
ccgcgagact cagtcgtgct gtgcagaccc tgtcccacaa actcacacgt aaggcgaagg     720
acttgcacac cagcatccaa cgcaacctgg atcagctgcg agatgagctc agtaccttca     780

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tccgtgtcag cacagacggg gcagacaaca gagactccct ggaccctcaa gctctctctg      840
acgaggtccg ccagagactc caggcttttc gacatgacac ctacctgcag atcgctgcat      900
tcaactcaggc cattgaccag gagaccgagg aaatccagca ccagctggca ccacccccgc      960
ctagccacag cgccttcgct ccagagttgg gacactcaga cagtaataag gccctgagca     1020
gactgcagag cgggctggac gacctctggg aagatattgc ctatggcctt catgaccagg     1080
gccatagtca gaataaccct gagggtcact cagggttaact ctgcagctcg ttgtctggac     1140
cctgagcctt cagcatggcc taataggcag aggggtggagg gtcctgcata ctattggcga     1200
ggccaccaaa ggtgctgctg ccccaacctg tctggcctcc tcaactcccc cactcagggtg     1260
cattacactc agtaggtttg gcaaacacag cttccgggtgc tcatttggga tcctaaggag     1320
caagagtggg gtgaaggagg tggggagatg gtgtgcgggg gagactgact gcaagccagt     1380
acttgaccgt tgctagaaac ctgtgtcact acaacctgga gcccggtcc tattacttca     1440
tgctgatgg tcgctgttat agtcggtcta cagaggggaa ctctgtctc cccagggttg     1500
tcatgacagc ctttgttggg agagagcagg agaacatgac acgtatgatg gagtgtgtac     1560
atccctgccg gtggtcctgc tgggggaatc agtgatggga taaatgtgtg catccctgca     1620
gtggtcctgc tgggggatca gtgatgggat ggggcagagc ccctatttcc ttagagaact     1680
ctaaccctaa taaggaactg agccctctgc agtgagggct tctgaaaacc ctgtacatag     1740
caaactgtgt gccctcttca tcatgcagtc cccacctcct gattctcggg atggaactga     1800
cttttggttg gaatgaaata gacgctcatg atggaaaaaa aaaaaaaaaa     1850

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<210> 12
<211> 1300
<212> DNA
<213> Rat RAP3 B

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```

<400> 12
gcatcgaggga aagcatggct gccgtcatca cctgggcact cgcctcctc tcagtgtttg      60
caactgtaca ggcgaggaag agcttctggg agtacttcgg ccagaacagc cagggcaaag     120
gcatgatggg ccagcagcag aagctggcac aggagagcct gaaaggtagc ttggagcaag     180
acctctacaa tatgaacaat ttcctagaaa agctgggacc cttgagagag cctgggaagg     240
agcctcctcg gctggcacag gatccagaag gcattcggaa gcagttgcag caagagctgg     300
aggaagtgag cacacgcctg gagccctaca tggctgcaaa gcaccagcag gtcggctgga     360

```

```

acctggaggg cttgaggcag cagttgaaac cctacacggg cgagctgatg gagcaggtag      420
gcctgagcgt gcaggatctg caagaacagc tgcgcatggg gggaaaaggc accaaggccc      480
agctcctggg gggcgtggat gaggcgatga gcctgctgca ggatatgcaa agtcgagtgc      540
tgcaccatac ggaccgagtc aaagaactct tccaccctta tgcagaacgc ttggtgactg      600
gaattgggca ccatgtgcag gagctgcacc ggagtgttgc tcctcaogca gttgccagcc      660
ccgcgagact cagtcgctgc gtgcagaccc tgtcccacaa actcacacgt aaggcgaagg      720
acttgcacac cagcatccaa cgcaacctgg atcagctgcg agatgagctc agtaccttca      780
tccgtgtcag cacagacggg gcagacaaca gagactccct ggacctcaa gctctctctg      840
acgaggtccg ccagagactc caggcttttc gacatgacac ctacctgcag atcgctgcat      900
tcactcaggc cattgaccag gagaccgagg aaatccagca ccagctggca ccacccccgc      960
ctagccacag cgccttcgct ccagagttgg gacactcaga cagtaataag gccctgagca     1020
gactgcagag ccggtgggac gacctctggg aagatattgc ctatggcctt catgaccagg     1080
gccatagtca gaataaccct gagggctact cagggttaact ctgcagctcg ttgtctggac     1140
cctgagcctt cagcatggcc taataggcag aggggtggagg gtccctgcata ctattggcga     1200
ggccaccaaa ggtgctgctg ccccaacctg tctggcctcc tcaactcccc cactcagggtg     1260
cattacactc agtaggtttg gcaaaaaaaaa aaaaaaaaaa                        1300

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<210> 13
<211> 367
<212> PRT
<213> Rat RAP3

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<400> 13
```

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Met Ala Ala Val Ile Thr Trp Ala Leu Ala Leu Leu Ser Val Phe Ala
1           5           10           15

Thr Val Gln Ala Arg Lys Ser Phe Trp Glu Tyr Phe Gly Gln Asn Ser
          20           25           30

Gln Gly Lys Gly Met Met Gly Gln Gln Gln Lys Leu Ala Gln Glu Ser
          35           40           45

Leu Lys Gly Ser Leu Glu Gln Asp Leu Tyr Asn Met Asn Asn Phe Leu
          50           55           60

Glu Lys Leu Gly Pro Leu Arg Glu Pro Gly Lys Glu Pro Pro Arg Leu
65           70           75           80

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Ala Gln Asp Pro Glu Gly Ile Arg Lys Gln Leu Gln Gln Glu Leu Glu
 85 90 95
 Glu Val Ser Thr Arg Leu Glu Pro Tyr Met Ala Ala Lys His Gln Gln
 100 105 110
 Val Gly Trp Asn Leu Glu Gly Leu Arg Gln Gln Leu Lys Pro Tyr Thr
 115 120 125
 Val Glu Leu Met Glu Gln Val Gly Leu Ser Val Gln Asp Leu Gln Glu
 130 135 140
 Gln Leu Arg Met Val Gly Lys Gly Thr Lys Ala Gln Leu Leu Gly Gly
 145 150 155 160
 Val Asp Glu Ala Met Ser Leu Leu Gln Asp Met Gln Ser Arg Val Leu
 165 170 175
 His His Thr Asp Arg Val Lys Glu Leu Phe His Pro Tyr Ala Glu Arg
 180 185 190
 Leu Val Thr Gly Ile Gly His His Val Gln Glu Leu His Arg Ser Val
 195 200 205
 Ala Pro His Ala Val Ala Ser Pro Ala Arg Leu Ser Arg Cys Val Gln
 210 215 220
 Thr Leu Ser His Lys Leu Thr Arg Lys Ala Lys Asp Leu His Thr Ser
 225 230 235 240
 Ile Gln Arg Asn Leu Asp Gln Leu Arg Asp Glu Leu Ser Thr Phe Ile
 245 250 255
 Arg Val Ser Thr Asp Gly Ala Asp Asn Arg Asp Ser Leu Asp Pro Gln
 260 265 270
 Ala Leu Ser Asp Glu Val Arg Gln Arg Leu Gln Ala Phe Arg His Asp
 275 280 285
 Thr Tyr Leu Gln Ile Ala Ala Phe Thr Gln Ala Ile Asp Gln Glu Thr
 290 295 300
 Glu Glu Ile Gln His Gln Leu Ala Pro Pro Pro Pro Ser His Ser Ala
 305 310 315 320
 Phe Ala Pro Glu Leu Gly His Ser Asp Ser Asn Lys Ala Leu Ser Arg
 325 330 335
 Leu Gln Ser Arg Leu Asp Asp Leu Trp Glu Asp Ile Ala Tyr Gly Leu
 340 345 350
 His Asp Gln Gly His Ser Gln Asn Asn Pro Glu Gly His Ser Gly
 355 360 365